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 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  FEB 27   New STN AnaVist pricing effective March 1, 2006
 NEWS  4  MAY 10   CA/CAplus enhanced with 1900-1906 U.S. patent records
 NEWS  5  MAY 11   KOREAPAT updates resume
 NEWS  6  MAY 19   Derwent World Patents Index to be reloaded and enhanced
 NEWS  7  MAY 30   IPC 8 Rolled-up Core codes added to CA/CAplus and
                   USPATFULL/USPAT2
 NEWS  8  MAY 30   The F-Term thesaurus is now available in CA/CAplus
 NEWS  9  JUN 02   The first reclassification of IPC codes now complete in
                   INPADOC
 NEWS 10  JUN 26   TULSA/TULSA2 reloaded and enhanced with new search and
                   and display fields
 NEWS 11  JUN 28   Price changes in full-text patent databases EPFULL and PCTFULL
 NEWS 12  JUl 11   CHEMSAFE reloaded and enhanced
 NEWS 13  JUl 14   FSTA enhanced with Japanese patents
 NEWS 14  JUl 19   Coverage of Research Disclosure reinstated in DWPI
 NEWS 15  AUG 09   INSPEC enhanced with 1898-1968 archive
 NEWS 16  AUG 28   ADISCTI Reloaded and Enhanced
 NEWS 17  AUG 30   CA(SM)/CAplus(SM) Austrian patent law changes
 NEWS 18  SEP 11   CA/CAplus enhanced with more pre-1907 records

 NEWS EXPRESS  JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8
 NEWS X25      X.25 communication option no longer available

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FILE 'HOME' ENTERED AT 15:06:58 ON 20 SEP 2006

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21
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FILE 'CAPLUS' ENTERED AT 15:07:09 ON 20 SEP 2006
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FILE COVERS 1907 - 20 Sep 2006 VOL 145 ISS 13
FILE LAST UPDATED: 19 Sep 2006 (20060919/ED)

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They are available for your review at:

http://www.cas.org/infopolicy.html

```
=> s HAUSP and MDM2
           51 HAUSP
         2970 MDM2
L1         21 HAUSP AND MDM2

=> s l1 not py>2004
      2147267 PY>2004
L2          6 L1 NOT PY>2004

=> d ibib 1-6

L2   ANSWER 1 OF 6  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:        2005:63694  CAPLUS
DOCUMENT NUMBER:         143:224203
TITLE:                   Dynamics in the p53-Mdm2 ubiquitination
                         pathway
AUTHOR(S):               Brooks, Christopher L.; Gu, Wei
CORPORATE SOURCE:        Institute for Cancer Genetics and Department of
                         Pathology; College of Physicions and Surgeons,
                         Columbia University, New York, NY, USA
SOURCE:                  Cell Cycle (2004), 3(7), 895-899
                         CODEN: CCEYAS; ISSN: 1538-4101
PUBLISHER:               Landes Bioscience
DOCUMENT TYPE:           Journal; General Review
LANGUAGE:                English
REFERENCE COUNT:         54    THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2   ANSWER 2 OF 6  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:        2005:60430  CAPLUS
DOCUMENT NUMBER:         142:215611
TITLE:                   HAUSP is required for p53 destabilization
AUTHOR(S):               Cummins, Jordan M.; Vogelstein, Bert
CORPORATE SOURCE:        The Howard Hughes Medical Institute, The Sidney Kimmel
                         Comprehensive Cancer Center, Program in Cellular and
                         Molecular Medicine, The Johns Hopkins University
                         Medical Institutions, Baltimore, MD, USA
SOURCE:                  Cell Cycle (2004), 3(6), 689-692
                         CODEN: CCEYAS; ISSN: 1538-4101
PUBLISHER:               Landes Bioscience
DOCUMENT TYPE:           Journal
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LANGUAGE: English
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:900604 CAPLUS
DOCUMENT NUMBER: 142:4278
TITLE: HAUSP/USP7 as an Epstein-Barr virus target
AUTHOR(S): Holowaty, M. N.; Frappier, L.
CORPORATE SOURCE: Department of Medical Genetics and Microbiology, University of Toronto, Toronto, Can.
SOURCE: Biochemical Society Transactions (2004), 32(5), 731-732
CODEN: BCSTB5; ISSN: 0300-5127
PUBLISHER: Portland Press Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:398363 CAPLUS
DOCUMENT NUMBER: 141:121361
TITLE: P53 apoptotic pathway molecules are frequently and simultaneously altered in nonsmall cell lung carcinoma
AUTHOR(S): Mori, Shoichi; Ito, Genshi; Usami, Noriyasu; Yoshioka, Hiromu; Ueda, Yuichi; Kodama, Yoshinori; Takahashi, Masahide; Fong, Kwun M.; Shimokata, Kaoru; Sekido, Yoshitaka
CORPORATE SOURCE: Department of Clinical Preventive Medicine, Department of Thoracic Surgery, Nagoya University School of Medicine, Nagoya, Japan
SOURCE: Cancer (New York, NY, United States) (2004), 100(8), 1673-1682
CODEN: CANCAR; ISSN: 0008-543X
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:312009 CAPLUS
DOCUMENT NUMBER: 140:300911
TITLE: A dynamic role of HAUSP in the p53-Mdm2 pathway
AUTHOR(S): Li, Muyang; Brooks, Christopher L.; Kon, Ning; Gu, Wei
CORPORATE SOURCE: Institute for Cancer Genetics and Department of Pathology College of Physicians and Surgeons, Columbia University, New York, NY, 10032, USA
SOURCE: Molecular Cell (2004), 13(6), 879-886
CODEN: MOCEFL; ISSN: 1097-2765
PUBLISHER: Cell Press
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:312567 CAPLUS
DOCUMENT NUMBER: 137:44608
TITLE: Deubiquitination of p53 by HAUSP is an important pathway for p53 stabilization
AUTHOR(S): Li, Muyang; Chen, Delin; Shiloh, Ariel; Luo, Jianyuan; Nikolaev, Anatoly Y.; Qin, Jun; Gu, Wei

CORPORATE SOURCE: Institute for Cancer Genetics, and Department of Pathology, College of Physicians b Surgeons, Columbia University, New York, NY, 10032, USA
SOURCE: Nature (London, United Kingdom) (2002), 416(6881), 648-652
CODEN: NATUAS; ISSN: 0028-0836
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s usp7
L3 40 USP7

=> s l3 and MDM2
2970 MDM2
L4 8 L3 AND MDM2

=> d ibib 1-8

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:197641 CAPLUS
DOCUMENT NUMBER: 144:288171
TITLE: Molecular recognition of p53 and MDM2 by USP7/HAUSP
AUTHOR(S): Sheng, Yi; Saridakis, Vivian; Sarkari, Feroz; Duan, Shili; Wu, Tianne; Arrowsmith, Cheryl H.; Frappier, Lori
CORPORATE SOURCE: Department of Medical Biophysics, Ontario Cancer Institute, Toronto, ON, M5G 1L7, Can.
SOURCE: Nature Structural & Molecular Biology (2006), 13(3), 285-291
CODEN: NSMBCU; ISSN: 1545-9993
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:156572 CAPLUS
DOCUMENT NUMBER: 145:119254
TITLE: Structural basis of competitive recognition of p53 and MDM2 by HAUSP/USP7: implications for the regulation of the p53-MDM2 pathway
AUTHOR(S): Hu, Min; Gu, Lichuan; Li, Muyang; Jeffrey, Philip D.; Gu, Wei; Shi, Yigong
CORPORATE SOURCE: Department of Molecular Biology, Lewis Thomas Laboratory, Princeton University, Princeton, NJ, USA
SOURCE: PLoS Biology (2006), 4(2), 228-239
CODEN: PBLIBG; ISSN: 1545-7885
URL: http://biology.plosjournals.org/archive/1545-7885/4/2/pdf/10.1371_1545-7885_4_2_complete.pdf
PUBLISHER: Public Library of Science
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English
REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1056192 CAPLUS
DOCUMENT NUMBER: 143:455700
TITLE: Reciprocal activities between herpes simplex virus

type 1 regulatory protein ICP0, a ubiquitin E3 ligase, and ubiquitin-specific protease USP7
AUTHOR(S): Boutell, Chris; Canning, Mary; Orr, Anne; Everett, Roger D.
CORPORATE SOURCE: MRC Virology Unit, Institute of Virology, Glasgow, G11 5JR, UK
SOURCE: Journal of Virology (2005), 79(19), 12342-12354
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:327153 CAPLUS
DOCUMENT NUMBER: 143:2872
TITLE: Structure of the p53 binding domain of HAUSP/USP7 bound to Epstein-Barr nuclear antigen 1: Implications for EBV-mediated immortalization
AUTHOR(S): Saridakis, Vivian; Sheng, Yi; Sarkari, Feroz; Holowaty, Melissa N.; Shire, Kathy; Nguyen, Tin; Zhang, Rongguang G.; Liao, Jack; Lee, Weontae; Edwards, Aled M.; Arrowsmith, Cheryl H.; Frappier, Lori
CORPORATE SOURCE: Department of Medical Genetics and Microbiology, University of Toronto, Toronto, ON, M5S 1A8, Can.
SOURCE: Molecular Cell (2005), 18(1), 25-36
CODEN: MOCEFL; ISSN: 1097-2765
PUBLISHER: Cell Press
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:60430 CAPLUS
DOCUMENT NUMBER: 142:215611
TITLE: HAUSP is required for p53 destabilization
AUTHOR(S): Cummins, Jordan M.; Vogelstein, Bert
CORPORATE SOURCE: The Howard Hughes Medical Institute, The Sidney Kimmel Comprehensive Cancer Center, Program in Cellular and Molecular Medicine, The Johns Hopkins University Medical Institutions, Baltimore, MD, USA
SOURCE: Cell Cycle (2004), 3(6), 689-692
CODEN: CCEYAS; ISSN: 1538-4101
PUBLISHER: Landes Bioscience
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1997 CAPLUS
DOCUMENT NUMBER: 142:111841
TITLE: Gene expression profiles and biomarkers for the detection of depression-related and other disease-related gene transcripts in blood
INVENTOR(S): Liew, Choong-Chin
PATENT ASSIGNEE(S): Chondrogene Limited, Can.
SOURCE: U.S. Pat. Appl. Publ., 154 pp., Cont.-in-part of U.S. Ser. No. 802,875.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 31
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| US 2004265868 | A1 | 20041230 | US 2004-812702 | | 20040330 |
| US 2004014059 | A1 | 20040122 | US 2002-268730 | | 20021009 |
| US 2006134635 | A1 | 20060622 | US 2004-802875 | | 20040312 |
| US 2005191637 | A1 | 20050901 | US 2004-803737 | | 20040318 |
| US 2005196762 | A1 | 20050908 | US 2004-803759 | | 20040318 |
| US 2005196763 | A1 | 20050908 | US 2004-803857 | | 20040318 |
| US 2005196764 | A1 | 20050908 | US 2004-803858 | | 20040318 |
| US 2005208505 | A1 | 20050922 | US 2004-803648 | | 20040318 |
| PRIORITY APPLN. INFO.: | | | US 1999-115125P | P | 19990106 |
| | | | US 2000-477148 | B1 | 20000104 |
| | | | US 2002-268730 | A2 | 20021009 |
| | | | US 2003-601518 | A2 | 20030620 |
| | | | US 2004-802875 | A2 | 20040312 |
| | | | US 2001-271955P | P | 20010228 |
| | | | US 2001-275017P | P | 20010312 |
| | | | US 2001-305340P | P | 20010713 |
| | | | US 2002-85783 | A2 | 20020228 |

L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:900604 CAPLUS
DOCUMENT NUMBER: 142:4278
TITLE: HAUSP/USP7 as an Epstein-Barr virus target
AUTHOR(S): Holowaty, M. N.; Frappier, L.
CORPORATE SOURCE: Department of Medical Genetics and Microbiology, University of Toronto, Toronto, Can.
SOURCE: Biochemical Society Transactions (2004), 32(5), 731-732
CODEN: BCSTB5; ISSN: 0300-5127
PUBLISHER: Portland Press Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:114335 CAPLUS
DOCUMENT NUMBER: 132:332744
TITLE: A genome-wide survey of RAS transformation targets
AUTHOR(S): Zuber, Johannes; Tchernitsa, Oleg I.; Hinzmann, Bernd; Schmitz, Anne-Chantal; Grips, Martin; Hellriegel, Martin; Sers, Christine; Rosenthal, Andre; Schafer, Reinhold
CORPORATE SOURCE: Laboratory of Molecular Tumour Pathology, Institute of Pathology, Charite, Humboldt-University, Berlin, D-10117, Germany
SOURCE: Nature Genetics (2000), 24(2), 144-152
CODEN: NGENEC; ISSN: 1061-4036
PUBLISHER: Nature America
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file pctfull

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 30.31 | 30.52 |

FILE 'PCTFULL' ENTERED AT 15:12:56 ON 20 SEP 2006

FILE LAST UPDATED: 18 SEP 2006 <20060918/UP>
MOST RECENT UPDATE WEEK: 200637 <200637/EW>
FILE COVERS 1978 TO DATE

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>>> NEW IPC8 DATA AND FUNCTIONALITY NOW AVAILABLE IN THIS FILE.
SEE
http://www.stn-international.de/stndatabases/details/ipc-reform.html >>>

>>> FOR CHANGES IN PCTFULL PLEASE SEE HELP CHANGE
(last updated April 10, 2006) <<<

>>> NEW PRICES IN PCTFULL AS OF 01 JULY 2006. FOR DETAILS,
PLEASE SEE HELP COST <<<

```
=> s USP7
L5          37 USP7

=> s HAUSP
L6          34 HAUSP

=> s l6 or l5
L7          59 L6 OR L5

=> s MDM2 and l7
           829 MDM2
L8          18 MDM2 AND L7

=> s screen? or ident?
        194428 SCREEN?
        478664 IDENT?
L9      532010 SCREEN? OR IDENT?

=> s l9 and l8
L10         18 L9 AND L8

=> s l10 not py>2002
        444636 PY>2002
L11          5 L10 NOT PY>2002

=> d ibib 1-5

L11    ANSWER 1 OF 5     PCTFULL   COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER:       2002070742 PCTFULL  ED 20020926  EW 200237
TITLE (ENGLISH):        METHOD FOR THE DEVELOPMENT OF GENE PANELS FOR
                        DIAGNOSTIC AND THERAPEUTIC PURPOSES BASED ON THE
                        EXPRESSION AND METHYLATOIN STATUS OF THE GENES
TITLE (FRENCH):         PROCEDE DE MISE AU POINT DE GROUPES D'ECHANTILLONS DE
                        GENES A DES FINS DE DIAGNOSTIC ET DE THERAPIE QUI SONT
                        BASES SUR L'EXPRESSION ET L'ETAT DE METHYLATION DES
                        GENES
INVENTOR(S):            OLEK, Alexander, Schroederstrasse 13/2, 10115 Berlin,
                        DE;
                        BERLIN, Kurt, Marienkaeferweg 4, 14532 Stahndorf, DE
PATENT ASSIGNEE(S):     EPIGENOMICS AG, Kastanienalle 24, 10435 Berlin, DE [DE,
                        DE]
AGENT:                  SCHOHE, Stefan$, Boehmert & Boehmert, Pettenkoferstr.
                        20-22, 80336 Muenchen$, DE
LANGUAGE OF FILING:     English
LANGUAGE OF PUBL.:      English
DOCUMENT TYPE:          Patent
PATENT INFORMATION:
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| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2002070742 | A1 | 20020912 |

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2002-EP2255 A 20020301

PRIORITY INFO.: US 2001-60/272,549 20010301

L11 ANSWER 2 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 2002070741 PCTFULL ED 20020926 EW 200237

TITLE (ENGLISH): METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR DETERMINING THE BIOLOGICAL EFFECT AND/OR ACTIVITY OF DRUGS, CHEMICAL SUBSTANCES AND/OR PHARMACEUTICAL COMPOSITIONS BASED ON THEIR EFFECT ON THE METHYLATION STATUS OF THE DNA

TITLE (FRENCH): PROCEDES, SYSTEMES ET PRODUITS PROGRAMMES INFORMATIQUES PERMETTANT DE DETERMINER L'EFFET BIOLOGIQUE ET/OU L'ACTIVITE DE MEDICAMENTS, DE SUBSTANCES CHIMIQUES ET/OU DE COMPOSITIONS PHARMACEUTIQUES, SUR LA BASE DE LEUR EFFET SUR L'ETAT DE METHYLATION DE L'ADN

INVENTOR(S): OLEK, Alexander, Schroederstrasse 13/2, 10115 Berlin, DE;
BERLIN, Kurt, Marienkaeferweg 4, 14532 Stahnsdorf, DE

PATENT ASSIGNEE(S): EPIGENOMICS AG, Kastanienallee 24, 10435 Berlin, DE [DE, DE]

AGENT: SCHOHE, Stefan$, Boehmert & Boehmert, Pettenkoferstrasse 20-22, 80336 Muenchen$, DE

LANGUAGE OF FILING: English

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

| | NUMBER | KIND | DATE |
|---|---|---|---|
| | WO 2002070741 | A2 | 20020912 |

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2002-EP2254 A 20020301

PRIORITY INFO.: US 2001-60/272,484 20010301

L11 ANSWER 3 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 2002057414 PCTFULL ED 20020801 EW 200230

TITLE (ENGLISH): LEUKOCYTE EXPRESSION PROFILING

TITLE (FRENCH): EVALUATION DU NIVEAU D'EXPRESSION LEUCOCYTAIRE

INVENTOR(S): WOHLGEMUTH, Jay, 664 Hamilton Avenue, Palo Alto, CA 94301, US [US, US];
FRY, Kirk, 2604 Ross Road, Palo Alto, CA 94303, US [US, US];

MATCUK, George, 141C Escondido Village, Stanford, CA 94305, US [US, US];
ALTMAN, Peter, 717 Evelyn Avenue, Albany, CA 94706, US [US, US];
PRENTICE, James, 120 Dolores Street, San Francisco, CA 94103, US [US, US];
PHILLIPS, Julie, 1090 Mirador Terrace, Pacifica, CA 94044, US [US, US];
LY, Ngoc, 2000 Crystal Springs Road 15-14, San Bruno, CA 94066, US [US, US];
WOODWARD, Robert, 1828 Rheem Court, Pleasanton, CA 94588, US [US, US];
QUERTERMOUS, Thomas, 44 El Rey Road, Portola Valley, CA 94028, US [US, US];
JOHNSON, Frances, 44 El Rey Road, Portola Valley, CA 94028, US [US, US]

PATENT ASSIGNEE(S): BIOCARDIA, INC., 384 Oyster Point Boulevard, #4, South San Francisco, CA 94080, US [US, US], for all designates States except US;
WOHLGEMUTH, Jay, 664 Hamilton Avenue, Palo Alto, CA 94301, US [US, US], for US only;
FRY, Kirk, 2604 Ross Road, Palo Alto, CA 94303, US [US, US], for US only;
MATCUK, George, 141C Escondido Village, Stanford, CA 94305, US [US, US], for US only;
ALTMAN, Peter, 717 Evelyn Avenue, Albany, CA 94706, US [US, US], for US only;
PRENTICE, James, 120 Dolores Street, San Francisco, CA 94103, US [US, US], for US only;
PHILLIPS, Julie, 1090 Mirador Terrace, Pacifica, CA 94044, US [US, US], for US only;
LY, Ngoc, 2000 Crystal Springs Road 15-14, San Bruno, CA 94066, US [US, US], for US only;
WOODWARD, Robert, 1828 Rheem Court, Pleasanton, CA 94588, US [US, US], for US only;
QUERTERMOUS, Thomas, 44 El Rey Road, Portola Valley, CA 94028, US [US, US], for US only;
JOHNSON, Frances, 44 El Rey Road, Portola Valley, CA 94028, US [US, US], for US only

AGENT: WARD, Michael, R.$, Morrison & Foerster LLP, 425 Market Street, San Francisco, CA 94105-2482$, US

LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002057414 | A2 | 20020725 |

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US47856 A 20011022
PRIORITY INFO.: US 2000-60/241,994 20001020
US 2001-60/296,764 20010608

L11 ANSWER 4 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER: 2000079267 PCTFULL ED 20020515

TITLE (ENGLISH): TREATMENT OF CANCER
TITLE (FRENCH): TRAITEMENT ANTICANCEREUX
INVENTOR(S): NIZETIC, Dean;
GROET, JuergenRP : GILL JENNINGS & EVERY
PATENT ASSIGNEE(S): SCHOOL OF PHARMACY, UNIVERSITY OF LONDON;
NIZETIC, Dean;
GROET, Juergen
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2000079267 | A2 | 20001228 |

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2000-GB2446 A 20000622
PRIORITY INFO.: GB 2000-0008161.2 20000403
GB 1999-9914589.8 19990622

L11 ANSWER 5 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER: 2000073479 PCTFULL ED 20020515
TITLE (ENGLISH): A COMBINED GROWTH FACTOR-DELETED AND THYMIDINE KINASE-DELETED VACCINIA VIRUS VECTOR
TITLE (FRENCH): VECTEUR DU VIRUS DE LA VACCINE COMBINANT DELETION DU FACTEUR DE CROISSANCE ET DELETION DE THYMIDINE KINASE
INVENTOR(S): MCCART, J., Andrea;
BARTLETT, David, L.;
MOSS, BernardRP : NATAUPSKY, Steven, J.
PATENT ASSIGNEE(S): THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES;
MCCART, J., Andrea;
BARTLETT, David, L.;
MOSS, Bernard
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2000073479 | A1 | 20001207 |

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2000-US14679 A 20000526
PRIORITY INFO.: US 1999-60/137,126 19990528

=> d kwic 4

L11 ANSWER 4 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN

DETD . . . as p53, could perhaps explain the

link to deletions of USPs in solid tumours. De-ubiquitination could play a
major role in the Mdm2 mediated control of p53 levels and its activation
mechanism, since the ubiquitin-mediated proteasome degradation of p53 is
an important effector arm of. . .

In recent years a number of other protein modifying polypeptide tags
have been identified. Many of these are related to ubiquitin and-have high
levels of identity and similarity (determined using the BLAST algorithm, for
instance) to ubiquitin itself. There is a recognised super family of such
proteins which. . .

. . .
human SUMO-1 (PIC1 1
Sentrin, hSmt3C), SUMO-2 (hSmt3A) and SUMO-3 (hSMT3B) belong to the
same family of UbL proteins with approximately 50% identity between
themselves, and some 15-30% identity and 40-60% similarity in amino acid
sequence to ubiquitin (Lapenta et al. 1997, Mannen et al. 1996, Kamitani et
al. 1998, Saitoh. . .

Several UbL hydrolase enzymes have been identified which convert
precursor UbL to active UbL. Some such enzymes interact with ubiquitin
itself as well as with other UbL's. Proteases involved in cleavage of
conjugates of UbL with target protein have been identified for instance
SENP1 and SUSP-1, which were recently cloned (Kim et al. 2000, Gong et
al. 2000a), and found to specifically cleave. . .

Valero, et al. (1 999) published after the first priority date of the
present application, have, in parallel identified this gene and pointed out the
gene product's sequence homologies to known USIP's in the conserred
peptide domains previously identified e.g. by d'Andrea et al (1 998). They
postulate a role in Alzheimer's disease. This protein has the HUGO
approved name USP25.

. . .
fusion protein of
the ubiquitin-like protein of interest and a detectable protein, and using the
usual separation and immune based or autoradiographic identification
techniques.

. . .
the specified domains,
some level of sequence homology with sequence ID 1 , for instance at least
20%, preferably at least 50%, identity with that sequence, and a level of
similarity of at least 50%, preferably at least 70% or more with that sequence
(in. . .

. . .
the corresponding mouse product, described in Valero, et al 1999
may be used or sequences which have the above levels of identity and
similarity with such a sequence.

. . .

outside the
specified domains, some level of sequence homology with sequence ID 1
for instance at least 20%, preferably at least 50%, identity
with that
sequence, and a level of similarity of at least 50%, preferably at least
70% or
more with that sequence (in. . . as the corresponding mouse product,
described in
Valero, et al 1999 may be used or sequences which have the above levels
of
identity and similarity with such a sequence.

Experimental
We identify a portion of human chromosome 21 homozygously
deleted in non-small cell non carcinoma (NSCLC) for further study. The
region contained the DNA. . .. et al. We found a shared region of
overlap (SRO) for the hemizygous loss in other NSCLC. The current work
is
to identify genes in the SRO which have a potential role in
tumour
suppression.

The exposure was for 14 hr to Molecular Dynamics (Sunnyvale, CA)
Phosphorimager screens. The I.M.A.G.E. Consortium (Lennon et
al., 1996)
cDNA clone ID 82471 0 and the Unigene clone A0021343 have been used as
labelled. . .

Identification and cloning of USP26
Twelve sequenced exon-trapped products, when analysed using
BLAST-N against public sequence databases, revealed clusters of
overlapping clDNA clones. Sequences. . .
. . .
with the binding of USP25 to its
natural ubiquitinated substrates, since this residue is conserved
between all
UCH-s and USP-s so far identified.
. . .
of the sequences found to be interacting, from the GenBank
database are given in the table,
Table 1. Summary of frequency and identities of specific
interacting
proteins from human brain with USP25-C178A, detected using Yeast-
Two-Hybrid technique
Summary of Results by Number of specific Accession number
decreasing. . .
. . .
SUMO-
1 (PIC1 , Sentrin, hSmt3C), SUMO-2 (hSmt3A) and SUMO-3 (hSMT3B)
belong to the same family of UbL proteins with approximately 50%
identity
between themselves, and some 15-30% identity and 40-60%
similarity in
amino acid sequence to ubiquitin (Lapenta et al. 1997, Mannen et al.
1996,
Kamitani et al. 1998, Saitoh. . .

Figure Legends
Figure 1. Identification of the Shared Region of Overlap
(S.R.O.) for hemizygous deletions in 21ql 1-q21 in NSCLCA Cytogenetic
map, Not I long range physical. . .
. . .
the single key
aminoacids in the Cys and His domains. Two reports show the
localisations

of the highly homologous sequences for the HAUSP gene to 3p21 (Kashuba,
et al 1997) and 16pl 3 (Robinson, et al 1998), respectively.

. . .

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localisation of USP15, a novel Human USP related to Unp Oncoprotein, and
a systematic nomenclature for hUSP's. Genomics. . .

. . .

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Takahashi, E., Tanigami, A., Ichiyama, A., Chung, C.H., Nakamura, Y., and
Tanaka, K. Identification and chromosomal assignment of USP1 , a novel
gene encoding a human ubiquitin-specific protease. Genomics, 54:155-158,
1998.

. . .

human chromosome 5q33-q34, UBH1,
encodes a novel deubiquitinating enzyme. Genomics 49:411
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degradation of p53, Nature 387:296
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M. A. . .

. . .

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chromosome 3: mapping of the TFRC, RA137 and HAUSP genes to regions
rearranged in leukemia and deleted in solid tumours. FEBS Lett 419:181-
185.

Assignment of herpesvirus-associated ubiquitin-specific protease gene
HAUSP to human chromosome band 16p 13.3 by in situ hybridisation,
Cytogenet. Cell Genet. 83:100.

=> file reg

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http://www.cas.org/ONLINE/UG/regprops.html

```
=> E "HAUSP"/CN 25
E1            1     HAUSMANNITE, MAGNESIAN (MN2(MN0.5-0.9MG0.1-0.5)O4)/CN
E2            1     HAUSMANNITE, ZINCIAN (MN2(MN0.5-0.9ZN0.1-0.5)O4)/CN
E3            0 --> HAUSP/CN
E4            1     HAUSP PROTEASE/CN
E5            1     HAUSTELLUM SPECIFIC PROTEIN B (SARCOPHAGA PEREGRINA GENE HSPB)/CN
E6            1     HAUTHANE HD 2334/CN
E7            1     HAUTHANE HD 2334, POLYMER WITH MONDUR TD 80 AND POLY-G 83-34/CN
E8            1     HAUTHANE HD 2001/CN
E9            1     HAUTHANE HD 4664/CN
E10           1     HAUTHANE L 2020/CN
E11           1     HAUTHAWAY IDA/CN
E12           1     HAUTOFOAM ES-AL/CN
E13           1     HAUTOFOAM ES-SI/CN
E14           1     HAUTOFOAM ES-TI/CN
E15           1     HAUTOFOAM ITO/CN
E16           1     HAUTOFOAM MS-Y/CN
E17           1     HAUTOFOAM NI/CN
E18           1     HAUTOFOAM SN/CN
E19           1     HAUTRIWAIC ACID/CN
E20           1     HAUTRIWAIC ACID Γ-LACTONE/CN
E21           1     HAUTRIWAIC ACID ACETATE/CN
E22           1     HAUTRIWAIC ACID LACTONE/CN
E23           1     HAUTRIWAIC ACID METHYL ESTER/CN
E24           1     HAUTRIWAIC ACID METHYL ESTER ACETATE/CN
E25           2     HAUYNE/CN

=> S E4
L12           1 "HAUSP PROTEASE"/CN

=> DIS L12 1 SQIDE
THE ESTIMATED COST FOR THIS REQUEST IS 6.36 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L12  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   109136-49-4  REGISTRY
CN   Proteinase, ubiquitin conjugate (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   DEN1 protease
CN   Deneddylase
CN   Deubiquination enzyme UBP1
CN   Deubiquitinase
CN   Deubiquitinating enzyme
CN   Deubiquitinating enzyme DUB-2
CN   HAUSP protease
CN   ISG15-specific protease UBP43
CN   Otubain 1
CN   Polyubiquitin proteinase
CN   Protease USP21
CN   Proteinase, ubiquitin-fusion protein
CN   Ubiquitin conjugate protease
CN   Ubiquitin conjugate proteinase
CN   Ubiquitin protease
CN   Ubiquitin proteinase
CN   Ubiquitin-fusion protein proteinase
```

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CN   Ubiquitin-specific processing protease
CN   Ubiquitin-specific protease
CN   Ubiquitin-specific protease 21
CN   Ubiquitin-specific proteinase
CN   UBP1 protease
DR   123175-78-0, 123175-79-1
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   AGRICOLA, BIOSIS, CA, CAPLUS, CIN, PROMT, TOXCENTER, USPAT2,
       USPATFULL
DT.CA  CAplus document type:  Conference; Dissertation; Journal; Patent
RL.P   Roles from patents:  ANST (Analytical study); BIOL (Biological study);
       MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC
       (Process); PRP (Properties); USES (Uses)
RLD.P  Roles for non-specific derivatives from patents:  ANST (Analytical
       study); BIOL (Biological study); PREP (Preparation); PRP (Properties);
       USES (Uses)
RL.NP  Roles from non-patents:  ANST (Analytical study); BIOL (Biological
       study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP
       (Properties); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents:  BIOL (Biological
       study); PROC (Process); PRP (Properties)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
             610 REFERENCES IN FILE CA (1907 TO DATE)
               7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             617 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> E "USP7"/CN 25
E1            1     USP6NL PROTEIN (HUMAN CLONE IMAGE:4838780)/CN
E2            1     USP6NL PROTEIN (HUMAN CLONE MGC:41831 IMAGE:5296060)/CN
E3            0 --> USP7/CN
E4            1     USP8 PROTEIN (HUMAN CLONE IMAGE:6429817 GENE USP8)/CN
E5            1     USP8 PROTEIN (MOUSE STRAIN FVB/N CLONE IMAGE:5041516 GENE
USP8)/CN
E6            1     USP8-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:53905
IMAGE:5543601)/CN
E7            1     USP9X PROTEIN (HUMAN CLONE IMAGE:4538919 GENE USP9X)/CN
E8            1     USP9X PROTEIN (HUMAN CLONE IMAGE:6175281 GENE USP9X)/CN
E9            1     USPA (MYCOBACTERIUM AVIUM PARATUBERCULOSIS STRAIN K-10 GENE
USPA)/CN
E10           1     USPA (NITROBACTER WINOGRADSKYI STRAIN NB-255)/CN
E11           1     USPA (PASTEURELLA MULTOCIDA STRAIN IL1403 CLONE PM70 GENE
USPA)/CN
E12           3     USPA (PSEUDOMONAS SYRINGAE SYRINGAE STRAIN B728A)/CN
E13           1     USPA FAMILY PROTEIN (BURKHOLDERIA MALLEI STRAIN ATCC 23344)/CN
E14           1     USPA FAMILY PROTEIN (BURKHOLDERIA THAILANDENSIS STRAIN E264)/CN
E15           3     USPA PROTEIN (MANNHEIMIA SUCCINICIPRODUCENS STRAIN MBEL55E GENE
USPA)/CN
E16           1     USPA-RELATED NUCLEOTIDE-BINDING PROTEIN (IDIOMARINA LOIHIENSIS
STRAIN L2TR GENE USPA)/CN
E17           1     USPA-RELATED NUCLEOTIDE-BINDING PROTEIN (IDIOMARINA LOIHIENSIS
STRAIN L2TR)/CN
E18           1     USPALLATINE/CN
E19           1     USPALLATINE 6-ACETATE/CN
E20           1     USPALLATINE ACETATE/CN
E21           1     USPALLATINECINE/CN
E22           1     USPC (MYCOBACTERIUM AVIUM PARATUBERCULOSIS STRAIN K-10 GENE
USPC)/CN
E23           1     USPCA/CN
E24           1     USPE (MYCOBACTERIUM AVIUM PARATUBERCULOSIS STRAIN K-10 GENE
USPE)/CN
E25           1     USPIO/CN
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=> E "USP 7"/CN 25
E1            1     USP 400/CN
E2            1     USP 400P/CN
E3            0 --> USP 7/CN
E4            1     USP 711/CN
E5            1     USP 90MD/CN
E6            1     USP DOMAIN (BACILLUS LICHENIFORMIS STRAIN ATCC 14580 GENE
YXIE)/CN
E7            1     USP10-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:53812
IMAGE:5542105)/CN
E8            1     USP10-PROV PROTEIN (XENOPUS TROPICALIS CLONE MGC:89480
IMAGE:6991947 GENE USP10-PROV)/CN
E9            1     USP11 PROTEIN (HUMAN CLONE IMAGE:2961383 GENE USP11)/CN
E10           1     USP11 PROTEIN (HUMAN CLONE IMAGE:4180680 GENE USP11)/CN
E11           1     USP12 PROTEIN (MOUSE CLONE MGC:55011 IMAGE:4500832)/CN
E12           1     USP12 PROTEIN (MOUSE STRAIN FVB/N CLONE IMAGE:5100708 GENE
USP12)/CN
E13           1     USP14 PROTEIN (MOUSE STRAIN 129/SV X 129/SV-CP CLONE MGC:60479
IMAGE:30006882)/CN
E14           1     USP15 PROTEIN (HUMAN CLONE IMAGE:4689787 GENE USP15)/CN
E15           1     USP15 PROTEIN (HUMAN CLONE IMAGE:4689787)/CN
E16           1     USP16 PROTEIN (MOUSE STRAIN CZECH II CLONE IMAGE:3586657 GENE
USP16)/CN
E17           1     USP16 PROTEIN (XENOPUS TROPICALIS CLONE IMAGE:6990711 GENE
USP16)/CN
E18           1     USP19 PROTEIN (HUMAN CLONE IMAGE:4478169 GENE USP19)/CN
E19           1     USP19 PROTEIN (HUMAN CLONE IMAGE:4859467 GENE USP19)/CN
E20           1     USP2 PROTEIN (HUMAN CLONE MGC:43844 IMAGE:5273400 GENE USP2)/CN
E21           1     USP2 PROTEIN (HUMAN CLONE MGC:43844 IMAGE:5273400)/CN
E22           1     USP2 PROTEIN (MOUSE CLONE MGC:27630 IMAGE:4506362)/CN
E23           1     USP21 PROTEIN (HUMAN CLONE IMAGE:2958151 GENE USP21)/CN
E24           1     USP21 PROTEIN (HUMAN CLONE MGC:3394 IMAGE:2958151)/CN
E25           1     USP22 PROTEIN (MOUSE STRAIN C57BL/6 CLONE IMAGE:5686812 GENE
USP22)/CN

=> E "USP-7"/CN 25
E1            1     USP 90MD/CN
E2            1     USP DOMAIN (BACILLUS LICHENIFORMIS STRAIN ATCC 14580 GENE
YXIE)/CN
E3            0 --> USP-7/CN
E4            1     USP10-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:53812
IMAGE:5542105)/CN
E5            1     USP10-PROV PROTEIN (XENOPUS TROPICALIS CLONE MGC:89480
IMAGE:6991947 GENE USP10-PROV)/CN
E6            1     USP11 PROTEIN (HUMAN CLONE IMAGE:2961383 GENE USP11)/CN
E7            1     USP11 PROTEIN (HUMAN CLONE IMAGE:4180680 GENE USP11)/CN
E8            1     USP12 PROTEIN (MOUSE CLONE MGC:55011 IMAGE:4500832)/CN
E9            1     USP12 PROTEIN (MOUSE STRAIN FVB/N CLONE IMAGE:5100708 GENE
USP12)/CN
E10           1     USP14 PROTEIN (MOUSE STRAIN 129/SV X 129/SV-CP CLONE MGC:60479
IMAGE:30006882)/CN
E11           1     USP15 PROTEIN (HUMAN CLONE IMAGE:4689787 GENE USP15)/CN
E12           1     USP15 PROTEIN (HUMAN CLONE IMAGE:4689787)/CN
E13           1     USP16 PROTEIN (MOUSE STRAIN CZECH II CLONE IMAGE:3586657 GENE
USP16)/CN
E14           1     USP16 PROTEIN (XENOPUS TROPICALIS CLONE IMAGE:6990711 GENE
USP16)/CN
E15           1     USP19 PROTEIN (HUMAN CLONE IMAGE:4478169 GENE USP19)/CN
E16           1     USP19 PROTEIN (HUMAN CLONE IMAGE:4859467 GENE USP19)/CN
E17           1     USP2 PROTEIN (HUMAN CLONE MGC:43844 IMAGE:5273400 GENE USP2)/CN
E18           1     USP2 PROTEIN (HUMAN CLONE MGC:43844 IMAGE:5273400)/CN
E19           1     USP2 PROTEIN (MOUSE CLONE MGC:27630 IMAGE:4506362)/CN
E20           1     USP21 PROTEIN (HUMAN CLONE IMAGE:2958151 GENE USP21)/CN
E21           1     USP21 PROTEIN (HUMAN CLONE MGC:3394 IMAGE:2958151)/CN
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E22          1     USP22 PROTEIN (MOUSE STRAIN C57BL/6 CLONE IMAGE:5686812 GENE
USP22)/CN
E23          1     USP24 PROTEIN (HUMAN CLONE IMAGE:4995223 GENE USP24)/CN
E24          1     USP24 PROTEIN (HUMAN CLONE MGC:29848 IMAGE:4995223)/CN
E25          1     USP24 PROTEIN (MOUSE STRAIN C57BL/6J CLONE MGC:41753
IMAGE:1381175)/CN

=> E 25
E26          1     USP25 PROTEIN (HUMAN CLONE IMAGE:3920963)/CN
E27          1     USP25-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:81666 IMAGE:6864548
GENE USP25-PROV)/CN
E28          1     USP28 PROTEIN (HUMAN CLONE MGC:70638 IMAGE:6140725)/CN
E29          1     USP28 PROTEIN (MOUSE STRAIN C57BL/6 CLONE MGC:91310
IMAGE:6835629)/CN
E30          1     USP3-PROV PROTEIN (XENOPUS TROPICALIS CLONE MGC:89592
IMAGE:6994758 GENE USP3-PROV)/CN
E31          1     USP30 PROTEIN (HUMAN CLONE IMAGE:3536512 GENE USP30)/CN
E32          1     USP30 PROTEIN (MOUSE STRAIN FVB/N CLONE IMAGE:4911968 GENE
USP30)/CN
E33          1     USP31 PROTEIN (HUMAN CLONE IMAGE:4650466)/CN
E34          1     USP32 PROTEIN (HUMAN CLONE IMAGE:6164242 GENE USP32)/CN
E35          1     USP32 PROTEIN (HUMAN CLONE IMAGE:6502630)/CN
E36          1     USP32 PROTEIN (MOUSE CLONE IMAGE:5369173 GENE USP32)/CN
E37          1     USP32 PROTEIN (MOUSE STRAIN C57BL/6 CLONE IMAGE:5706776 GENE
USP32)/CN
E38          1     USP33 PROTEIN (MOUSE CLONE IMAGE:5359218 GENE USP33)/CN
E39          1     USP33 PROTEIN (MOUSE STRAIN CZECH II CLONE IMAGE:5066137 GENE
USP33)/CN
E40          1     USP33 PROTEIN (MOUSE STRAIN MIX FVB/N, C57BL/6J CLONE
IMAGE:3491447 GENE USP33)/CN
E41          1     USP34 PROTEIN (HUMAN CLONE IMAGE:3846921 GENE USP34)/CN
E42          1     USP34 PROTEIN (HUMAN CLONE IMAGE:5426830)/CN
E43          1     USP34 PROTEIN (MOUSE STRAIN C57BL/6 CLONE IMAGE:5708348 GENE
USP34)/CN
E44          1     USP34 PROTEIN (MOUSE STRAIN CZECH II CLONE IMAGE:3983228 GENE
USP34)/CN
E45          1     USP36 PROTEIN (HUMAN CLONE MGC:87250 IMAGE:30345255)/CN
E46          1     USP39 PROTEIN (HUMAN CLONE IMAGE:3050936 GENE USP39)/CN
E47          1     USP4 PROTEIN (MOUSE STRAIN C57BL/6J CLONE IMAGE:30433369 GENE
USP4)/CN
E48          1     USP4 PROTEIN (MOUSE STRAIN C57BL/6J CLONE IMAGE:30457732 GENE
USP4)/CN
E49          1     USP4 PROTEIN (MOUSE STRAIN CZECH II CLONE MGC:18374
IMAGE:3661165)/CN
E50          1     USP42 PROTEIN (HUMAN CLONE IMAGE:30343487 GENE USP42)/CN

=> E 25
E51          1     USP43 PROTEIN (MOUSE STRAIN FVB/N CLONE IMAGE:3711168 GENE
USP43)/CN
E52          1     USP43 PROTEIN (MOUSE STRAIN FVB/N CLONE MGC:38313
IMAGE:5343429)/CN
E53          1     USP44 PROTEIN (HUMAN CLONE MGC:26981 IMAGE:4825887)/CN
E54          1     USP45 PROTEIN (HUMAN CLONE MGC:14793 IMAGE:4047601)/CN
E55          1     USP46-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:53480
IMAGE:5572291)/CN
E56          1     USP47 PROTEIN (HUMAN CLONE IMAGE:3350895 GENE USP47)/CN
E57          1     USP47 PROTEIN (HUMAN CLONE IMAGE:5575723)/CN
E58          1     USP47 PROTEIN (MOUSE STRAIN C57BL/6 CLONE IMAGE:6813792)/CN
E59          1     USP47 PROTEIN (MOUSE STRAIN CZECH II CLONE IMAGE:5068518 GENE
USP47)/CN
E60          1     USP47 PROTEIN (MOUSE STRAIN FVB/N CLONE IMAGE:4211195 GENE
USP47)/CN
E61          1     USP48 PROTEIN (HUMAN CLONE IMAGE:3897418 GENE USP48)/CN
E62          1     USP48 PROTEIN (HUMAN CLONE IMAGE:4650466 GENE USP48)/CN
E63          1     USP48 PROTEIN (HUMAN CLONE IMAGE:4650466)/CN
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E64          1     USP48 PROTEIN (HUMAN CLONE IMAGE:6514749 GENE USP48)/CN
E65          1     USP48 PROTEIN (MOUSE STRAIN FVB/N CLONE MGC:25724 IMAGE:3979404
GENE USP48)/CN
E66          1     USP49 PROTEIN (MOUSE STRAIN C57BL/6 CLONE MGC:63299
IMAGE:6408678)/CN
E67          1     USP5 PROTEIN (HUMAN CLONE MGC:1586 IMAGE:3506801)/CN
E68          1     USP51 PROTEIN (HUMAN CLONE IMAGE:5391875 GENE USP51)/CN
E69          1     USP52 PROTEIN (MOUSE STRAIN CZECH II CLONE IMAGE:3591885 GENE
USP52)/CN
E70          1     USP52 PROTEIN (MOUSE STRAIN FVB/N CLONE IMAGE:4988880)/CN
E71          1     USP53 PROTEIN (HUMAN CLONE MGC:22206 IMAGE:4082351)/CN
E72          1     USP53 PROTEIN (MOUSE STRAIN FVB/N CLONE IMAGE:4236151 GENE
USP53)/CN
E73          1     USP54 PROTEIN (HUMAN CLONE IMAGE:6148876 GENE USP54)/CN
E74          1     USP54 PROTEIN (MOUSE STRAIN CD1 CLONE IMAGE:30088889 GENE
USP54)/CN
E75          1     USP54 PROTEIN (MOUSE STRAIN CD1 CLONE IMAGE:30096132 GENE
USP54)/CN

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E76          1     USP6 N-TERMINAL LIKE (MOUSE CLONE MGC:57018 IMAGE:6466270 GENE
USP6NL)/CN
E77          1     USP6NL PROTEIN (HUMAN CLONE IMAGE:4047207 GENE USP6NL)/CN
E78          1     USP6NL PROTEIN (HUMAN CLONE IMAGE:4838780)/CN
E79          1     USP6NL PROTEIN (HUMAN CLONE MGC:41831 IMAGE:5296060)/CN
E80          1     USP8 PROTEIN (HUMAN CLONE IMAGE:6429817 GENE USP8)/CN
E81          1     USP8 PROTEIN (MOUSE STRAIN FVB/N CLONE IMAGE:5041516 GENE
USP8)/CN
E82          1     USP8-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:53905
IMAGE:5543601)/CN
E83          1     USP9X PROTEIN (HUMAN CLONE IMAGE:4538919 GENE USP9X)/CN
E84          1     USP9X PROTEIN (HUMAN CLONE IMAGE:6175281 GENE USP9X)/CN
E85          1     USPA (MYCOBACTERIUM AVIUM PARATUBERCULOSIS STRAIN K-10 GENE
USPA)/CN
E86          1     USPA (NITROBACTER WINOGRADSKYI STRAIN NB-255)/CN
E87          1     USPA (PASTEURELLA MULTOCIDA STRAIN IL1403 CLONE PM70 GENE
USPA)/CN
E88          3     USPA (PSEUDOMONAS SYRINGAE SYRINGAE STRAIN B728A)/CN
E89          1     USPA FAMILY PROTEIN (BURKHOLDERIA MALLEI STRAIN ATCC 23344)/CN
E90          1     USPA FAMILY PROTEIN (BURKHOLDERIA THAILANDENSIS STRAIN E264)/CN
E91          3     USPA PROTEIN (MANNHEIMIA SUCCINICIPRODUCENS STRAIN MBEL55E GENE
USPA)/CN
E92          1     USPA-RELATED NUCLEOTIDE-BINDING PROTEIN (IDIOMARINA LOIHIENSIS
STRAIN L2TR GENE USPA)/CN
E93          1     USPA-RELATED NUCLEOTIDE-BINDING PROTEIN (IDIOMARINA LOIHIENSIS
STRAIN L2TR)/CN
E94          1     USPALLATINE/CN
E95          1     USPALLATINE 6-ACETATE/CN
E96          1     USPALLATINE ACETATE/CN
E97          1     USPALLATINECINE/CN
E98          1     USPC (MYCOBACTERIUM AVIUM PARATUBERCULOSIS STRAIN K-10 GENE
USPC)/CN
E99          1     USPCA/CN
E100         1     USPE (MYCOBACTERIUM AVIUM PARATUBERCULOSIS STRAIN K-10 GENE
USPE)/CN

=> file medline
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                               8.42      54.46

FILE 'MEDLINE' ENTERED AT 15:19:32 ON 20 SEP 2006

 FILE LAST UPDATED: 19 Sep 2006 (20060919/UP).  FILE COVERS 1950 TO DATE.
```

On December 11, 2005, the 2006 MeSH terms were loaded.

The MEDLINE reload for 2006 is now (26 Feb.) available. For details on the 2006 reload, enter HELP RLOAD at an arrow prompt (=>). See also:

http://www.nlm.nih.gov/mesh/
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_med_data_changes.html
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_2006_MeSH.html

OLDMEDLINE is covered back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2006 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s HAUSP or (USP () 7)
            39 HAUSP
          4983 USP
            37 USPS
          5006 USP
                 (USP OR USPS)
       1527014 7
             0 USP (W) 7
L13          39 HAUSP OR (USP (W) 7)

=> s HAUSP or (USP7)
            39 HAUSP
            47 USP7
L14          55 HAUSP OR (USP7)

=> s MDM2
L15        2699 MDM2

=> s l15 and l14
L16          18 L15 AND L14

=> s l16 not py>2002
       2271354 PY>2002
                 (PY>20029999)
L17           1 L16 NOT PY>2002

=> d ibib

L17  ANSWER 1 OF 1     MEDLINE on STN
ACCESSION NUMBER:    2002212418     MEDLINE
DOCUMENT NUMBER:     PubMed ID: 11923872
TITLE:               Deubiquitination of p53 by HAUSP is an important
                     pathway for p53 stabilization.
AUTHOR:              Li Muyang; Chen Delin; Shiloh Ariel; Luo Jianyuan; Nikolaev
                     Anatoly Y; Qin Jun; Gu Wei
CORPORATE SOURCE:    Institute for Cancer Genetics, and Department of Pathology,
                     College of Physicians & Surgeons, Columbia University, 1150
                     St Nicholas Avenue, New York, New York 10032, USA.
SOURCE:              Nature, (2002 Apr 11) Vol. 416, No. 6881, pp. 648-53.
                     Electronic Publication: 2002-03-31.
                     Journal code: 0410462. ISSN: 0028-0836.
PUB. COUNTRY:        England: United Kingdom
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         200205
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ENTRY DATE: Entered STN: 12 Apr 2002
Last Updated on STN: 18 May 2002
Entered Medline: 17 May 2002

=> d abs

L17 ANSWER 1 OF 1 MEDLINE on STN
AB The p53 tumour suppressor is a short-lived protein that is maintained at low levels in normal cells by Mdm2-mediated ubiquitination and subsequent proteolysis. Stabilization of p53 is crucial for its tumour suppressor function. However, the precise mechanism by which ubiquitinated p53 levels are regulated in vivo is not completely understood. By mass spectrometry of affinity-purified p53-associated factors, we have identified herpesvirus-associated ubiquitin-specific protease (HAUSP) as a novel p53-interacting protein. HAUSP strongly stabilizes p53 even in the presence of excess Mdm2, and also induces p53-dependent cell growth repression and apoptosis. Significantly, HAUSP has an intrinsic enzymatic activity that specifically deubiquitinates p53 both in vitro and in vivo. In contrast, expression of a catalytically inactive point mutant of HAUSP in cells increases the levels of p53 ubiquitination and destabilizes p53. These findings reveal an important mechanism by which p53 can be stabilized by direct deubiquitination and also imply that HAUSP might function as a tumour suppressor in vivo through the stabilization of p53.

=> d his

(FILE 'HOME' ENTERED AT 15:06:58 ON 20 SEP 2006)

FILE 'CAPLUS' ENTERED AT 15:07:09 ON 20 SEP 2006
L1 21 S HAUSP AND MDM2
L2 6 S L1 NOT PY>2004
L3 40 S USP7
L4 8 S L3 AND MDM2

FILE 'PCTFULL' ENTERED AT 15:12:56 ON 20 SEP 2006
L5 37 S USP7
L6 34 S HAUSP
L7 59 S L6 OR L5
L8 18 S MDM2 AND L7
L9 532010 S SCREEN? OR IDENT?
L10 18 S L9 AND L8
L11 5 S L10 NOT PY>2002

FILE 'REGISTRY' ENTERED AT 15:17:14 ON 20 SEP 2006
E "HAUSP"/CN 25
L12 1 S E4
E "USP7"/CN 25
E "USP 7"/CN 25
E "USP-7"/CN 25

FILE 'MEDLINE' ENTERED AT 15:19:32 ON 20 SEP 2006
L13 39 S HAUSP OR (USP () 7)
L14 55 S HAUSP OR (USP7)
L15 2699 S MDM2
L16 18 S L15 AND L14
L17 1 S L16 NOT PY>2002

=> file pctfull

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 3.73 | 58.19 |

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FILE 'PCTFULL' ENTERED AT 15:24:49 ON 20 SEP 2006
COPYRIGHT (C) 2006 Univentio

FILE LAST UPDATED:         18 SEP 2006      <20060918/UP>
MOST RECENT UPDATE WEEK:       200637        <200637/EW>
FILE COVERS 1978 TO DATE

>>> IMAGES ARE AVAILABLE ONLINE AND FOR EMAIL-PRINTS <<<

>>> NEW IPC8 DATA AND FUNCTIONALITY NOW AVAILABLE IN THIS FILE.
    SEE
    http://www.stn-international.de/stndatabases/details/ipc-reform.html >>>

>>> FOR CHANGES IN PCTFULL PLEASE SEE HELP CHANGE
    (last updated April 10, 2006) <<<

>>> NEW PRICES IN PCTFULL AS OF 01 JULY 2006. FOR DETAILS,
    PLEASE SEE HELP COST <<<

=> d l11 ibib

L11    ANSWER 1 OF 5     PCTFULL   COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER:        2002070742 PCTFULL  ED 20020926  EW 200237
TITLE (ENGLISH):         METHOD FOR THE DEVELOPMENT OF GENE PANELS FOR
                         DIAGNOSTIC AND THERAPEUTIC PURPOSES BASED ON THE
                         EXPRESSION AND METHYLATOIN STATUS OF THE GENES
TITLE (FRENCH):          PROCEDE DE MISE AU POINT DE GROUPES D'ECHANTILLONS DE
                         GENES A DES FINS DE DIAGNOSTIC ET DE THERAPIE QUI SONT
                         BASES SUR L'EXPRESSION ET L'ETAT DE METHYLATION DES
                         GENES
INVENTOR(S):             OLEK, Alexander, Schroederstrasse 13/2, 10115 Berlin,
                         DE;
                         BERLIN, Kurt, Marienkaeferweg 4, 14532 Stahndorf, DE
PATENT ASSIGNEE(S):      EPIGENOMICS AG, Kastanienalle 24, 10435 Berlin, DE [DE,
                         DE]
AGENT:                   SCHOHE, Stefan$, Boehmert & Boehmert, Pettenkoferstr.
                         20-22, 80336 Muenchen$, DE
LANGUAGE OF FILING:      English
LANGUAGE OF PUBL.:       English
DOCUMENT TYPE:           Patent
PATENT INFORMATION:
                         NUMBER              KIND     DATE
                         ---------------------------------
                         WO 2002070742         A1 20020912
DESIGNATED STATES
       W:                AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR
                         CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID
                         IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD
                         MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
                         SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
       RW (ARIPO):       GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
       RW (EAPO):        AM AZ BY KG KZ MD RU TJ TM
       RW (EPO):         AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
                         TR
       RW (OAPI):        BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.:       WO 2002-EP2255        A  20020301
PRIORITY INFO.:          US 2001-60/272,549       20010301


=> d l11 ibib 1-5

L11    ANSWER 1 OF 5     PCTFULL   COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER:        2002070742 PCTFULL  ED 20020926  EW 200237
TITLE (ENGLISH):         METHOD FOR THE DEVELOPMENT OF GENE PANELS FOR
```

DIAGNOSTIC AND THERAPEUTIC PURPOSES BASED ON THE EXPRESSION AND METHYLATOIN STATUS OF THE GENES

TITLE (FRENCH): PROCEDE DE MISE AU POINT DE GROUPES D'ECHANTILLONS DE GENES A DES FINS DE DIAGNOSTIC ET DE THERAPIE QUI SONT BASES SUR L'EXPRESSION ET L'ETAT DE METHYLATION DES GENES

INVENTOR(S): OLEK, Alexander, Schroederstrasse 13/2, 10115 Berlin, DE;
BERLIN, Kurt, Marienkaeferweg 4, 14532 Stahndorf, DE

PATENT ASSIGNEE(S): EPIGENOMICS AG, Kastanienalle 24, 10435 Berlin, DE [DE, DE]

AGENT: SCHOHE, Stefan$, Boehmert & Boehmert, Pettenkoferstr. 20-22, 80336 Muenchen$, DE

LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002070742 | A1 | 20020912 |

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2002-EP2255 A 20020301
PRIORITY INFO.: US 2001-60/272,549 20010301

L11 ANSWER 2 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER: 2002070741 PCTFULL ED 20020926 EW 200237

TITLE (ENGLISH): METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR DETERMINING THE BIOLOGICAL EFFECT AND/OR ACTIVITY OF DRUGS, CHEMICAL SUBSTANCES AND/OR PHARMACEUTICAL COMPOSITIONS BASED ON THEIR EFFECT ON THE METHYLATION STATUS OF THE DNA

TITLE (FRENCH): PROCEDES, SYSTEMES ET PRODUITS PROGRAMMES INFORMATIQUES PERMETTANT DE DETERMINER L'EFFET BIOLOGIQUE ET/OU L'ACTIVITE DE MEDICAMENTS, DE SUBSTANCES CHIMIQUES ET/OU DE COMPOSITIONS PHARMACEUTIQUES, SUR LA BASE DE LEUR EFFET SUR L'ETAT DE METHYLATION DE L'ADN

INVENTOR(S): OLEK, Alexander, Schroederstrasse 13/2, 10115 Berlin, DE;
BERLIN, Kurt, Marienkaeferweg 4, 14532 Stahnsdorf, DE

PATENT ASSIGNEE(S): EPIGENOMICS AG, Kastanienallee 24, 10435 Berlin, DE [DE, DE]

AGENT: SCHOHE, Stefan$, Boehmert & Boehmert, Pettenkoferstrasse 20-22, 80336 Muenchen$, DE

LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002070741 | A2 | 20020912 |

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI

SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.: WO 2002-EP2254 A 20020301
PRIORITY INFO.: US 2001-60/272,484 20010301

L11 ANSWER 3 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER: 2002057414 PCTFULL ED 20020801 EW 200230
TITLE (ENGLISH): LEUKOCYTE EXPRESSION PROFILING
TITLE (FRENCH): EVALUATION DU NIVEAU D'EXPRESSION LEUCOCYTAIRE
INVENTOR(S): WOHLGEMUTH, Jay, 664 Hamilton Avenue, Palo Alto, CA 94301, US [US, US];
FRY, Kirk, 2604 Ross Road, Palo Alto, CA 94303, US [US, US];
MATCUK, George, 141C Escondido Village, Stanford, CA 94305, US [US, US];
ALTMAN, Peter, 717 Evelyn Avenue, Albany, CA 94706, US [US, US];
PRENTICE, James, 120 Dolores Street, San Francisco, CA 94103, US [US, US];
PHILLIPS, Julie, 1090 Mirador Terrace, Pacifica, CA 94044, US [US, US];
LY, Ngoc, 2000 Crystal Springs Road 15-14, San Bruno, CA 94066, US [US, US];
WOODWARD, Robert, 1828 Rheem Court, Pleasanton, CA 94588, US [US, US];
QUERTERMOUS, Thomas, 44 El Rey Road, Portola Valley, CA 94028, US [US, US];
JOHNSON, Frances, 44 El Rey Road, Portola Valley, CA 94028, US [US, US]
PATENT ASSIGNEE(S): BIOCARDIA, INC., 384 Oyster Point Boulevard, #4, South San Francisco, CA 94080, US [US, US], for all designates States except US;
WOHLGEMUTH, Jay, 664 Hamilton Avenue, Palo Alto, CA 94301, US [US, US], for US only;
FRY, Kirk, 2604 Ross Road, Palo Alto, CA 94303, US [US, US], for US only;
MATCUK, George, 141C Escondido Village, Stanford, CA 94305, US [US, US], for US only;
ALTMAN, Peter, 717 Evelyn Avenue, Albany, CA 94706, US [US, US], for US only;
PRENTICE, James, 120 Dolores Street, San Francisco, CA 94103, US [US, US], for US only;
PHILLIPS, Julie, 1090 Mirador Terrace, Pacifica, CA 94044, US [US, US], for US only;
LY, Ngoc, 2000 Crystal Springs Road 15-14, San Bruno, CA 94066, US [US, US], for US only;
WOODWARD, Robert, 1828 Rheem Court, Pleasanton, CA 94588, US [US, US], for US only;
QUERTERMOUS, Thomas, 44 El Rey Road, Portola Valley, CA 94028, US [US, US], for US only;
JOHNSON, Frances, 44 El Rey Road, Portola Valley, CA 94028, US [US, US], for US only
AGENT: WARD, Michael, R.$, Morrison & Foerster LLP, 425 Market Street, San Francisco, CA 94105-2482$, US
LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2002057414 | A2 | 20020725 |

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US47856 A 20011022

PRIORITY INFO.: US 2000-60/241,994 20001020
US 2001-60/296,764 20010608

L11 ANSWER 4 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 2000079267 PCTFULL ED 20020515

TITLE (ENGLISH): TREATMENT OF CANCER

TITLE (FRENCH): TRAITEMENT ANTICANCEREUX

INVENTOR(S): NIZETIC, Dean;
GROET, JuergenRP : GILL JENNINGS & EVERY

PATENT ASSIGNEE(S): SCHOOL OF PHARMACY, UNIVERSITY OF LONDON;
NIZETIC, Dean;
GROET, Juergen

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2000079267 | A2 | 20001228 |

DESIGNATED STATES
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2000-GB2446 A 20000622

PRIORITY INFO.: GB 2000-0008161.2 20000403
GB 1999-9914589.8 19990622

L11 ANSWER 5 OF 5 PCTFULL COPYRIGHT 2006 Univentio on STN

ACCESSION NUMBER: 2000073479 PCTFULL ED 20020515

TITLE (ENGLISH): A COMBINED GROWTH FACTOR-DELETED AND THYMIDINE KINASE-DELETED VACCINIA VIRUS VECTOR

TITLE (FRENCH): VECTEUR DU VIRUS DE LA VACCINE COMBINANT DELETION DU FACTEUR DE CROISSANCE ET DELETION DE THYMIDINE KINASE

INVENTOR(S): MCCART, J., Andrea;
BARTLETT, David, L.;
MOSS, BernardRP : NATAUPSKY, Steven, J.

PATENT ASSIGNEE(S): THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES;
MCCART, J., Andrea;
BARTLETT, David, L.;
MOSS, Bernard

LANGUAGE OF PUBL.: English

DOCUMENT TYPE: Patent

PATENT INFORMATION:

| NUMBER | KIND | DATE |
|---|---|---|
| WO 2000073479 | A1 | 20001207 |

DESIGNATED STATES

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      W:              AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ
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                      JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN
                      MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
                      TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD SL SZ
                      TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK
                      ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM
                      GA GN GW ML MR NE SN TD TG
APPLICATION INFO.:    WO 2000-US14679      A  20000526
PRIORITY INFO.:       US 1999-60/137,126       19990528


=> d l11 ibib kwic 2

L11    ANSWER 2 OF 5     PCTFULL   COPYRIGHT 2006 Univentio on STN
ACCESSION NUMBER:     2002070741 PCTFULL  ED 20020926  EW 200237
TITLE (ENGLISH):      METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR
                      DETERMINING THE BIOLOGICAL EFFECT AND/OR ACTIVITY OF
                      DRUGS, CHEMICAL SUBSTANCES AND/OR PHARMACEUTICAL
                      COMPOSITIONS BASED ON THEIR EFFECT ON THE METHYLATION
                      STATUS OF THE DNA
TITLE (FRENCH):       PROCEDES, SYSTEMES ET PRODUITS PROGRAMMES INFORMATIQUES
                      PERMETTANT DE DETERMINER L'EFFET BIOLOGIQUE ET/OU
                      L'ACTIVITE DE MEDICAMENTS, DE SUBSTANCES CHIMIQUES
                      ET/OU DE COMPOSITIONS PHARMACEUTIQUES, SUR LA BASE DE
                      LEUR EFFET SUR L'ETAT DE METHYLATION DE L'ADN
INVENTOR(S):          OLEK, Alexander, Schroederstrasse 13/2, 10115 Berlin,
                      DE;
                      BERLIN, Kurt, Marienkaeferweg 4, 14532 Stahnsdorf, DE
PATENT ASSIGNEE(S):   EPIGENOMICS AG, Kastanienallee 24, 10435 Berlin, DE
                      [DE, DE]
AGENT:                SCHOHE, Stefan$, Boehmert & Boehmert,
                      Pettenkoferstrasse 20-22, 80336 Muenchen$, DE
LANGUAGE OF FILING:   English
LANGUAGE OF PUBL.:    English
DOCUMENT TYPE:        Patent
PATENT INFORMATION:
                      NUMBER              KIND     DATE
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                      WO 2002070741         A2 20020912
DESIGNATED STATES
      W:              AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR
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                      IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD
                      MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
                      SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
      RW (ARIPO):     GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
      RW (EAPO):      AM AZ BY KG KZ MD RU TJ TM
      RW (EPO):       AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
                      TR
      RW (OAPI):      BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
APPLICATION INFO.:    WO 2002-EP2254        A  20020301
PRIORITY INFO.:       US 2001-60/272,484       20010301

DETD  . . . since in most of the cases an effective
      drug/treatment has to be found very rapidly,
      Furthermore, such developments currently involve very cost-intensive
      screening procedures
      until a particularly suited compound (often called Jead&quot;-cornpound)
      is.found which could
      then serve as a chemical basis for an effective treatment.
 . . .
      of course, alternative
      treatments for already known diseases. Furthermore, the need exists for
      a reliable, cost-
```

effective, fast and autornateable method for screening such new effective compounds.

2. Screening for new biologically active compounds using ,combinatorial chemistry"
The method of combinatorial chemistry is described as a profound change in the. . . AT, et
al. ,Search and discovery strategies for biotechnology: the paradigm shift." Microbiol Mol
Biol Rev 2000 Sep;64(3):573-606)
In general, combinatorial chemistry involves screening of a specific (or a set of specific)
compound with a vast number of otential biological candidate substances for example, pro-
p
teins) that might interact with the compound. Interacting partners are selected and used for
further screening. Initially screened and isolated
compounds can be used as Jead"-
compounds for the development of biologically active compounds.useful for treatment of dis-
eases.

.
potential utility for the treatment of
conditions involving cerebral hypoxia." Life Sci 2000 Aug 1
1;67(12):1389-96) describe the
use of HTS (high-throughput screening) libraries for
reevaluation of the pharmacologic prop-
erties of substances such as extract from the leaves of Ginkgo biloba Linne (form.. . .

Although the method of combinatorial chemistry exhibits several advantages in comparison to
conventional methods for screening for biologically effective compounds which are useful for
the development of new medicaments, there are still several drawbacks associated with this
method.

The screening of a combinatorial chemistry library involves a screening for a multitude of
different possible reactions and/or interactions of the comp6unds to be analysed with the in-
teracting partners. Therefore, the reaction conditions are assumed crucial for the result of the
screening. In particular, a compound which shows an
interaction with a target in such a corn-
binatorial assay in vitro might exhibit. . . prediction of an effective compound very difficult and unreliable. As a result, an inter-
action in an in vitro combinatorial chemistry screening assay can always only give a hint for a
potential biological function of the screened compound in vivo.

As a result, combinatorial chemistry screening involves a necessary second step; once a po-
tential target/lead compound has been identified/found, the biological effect still has to be
confirmed/determined in an in vivo context. This makes compound identification using this
method unpredictable, slow and costly.

.
only individual regions
up to approximately 3000 base pairs in length have been examined, and an overall examina-

tion of cells to identify thousands of possible methylation events is not- possible. However, this method is not capable of reliably analyzing minute fragments from small. . .

. . .

Burkitt's lym-
phorna: molecular analysis of primary tumor tissue" Blood 1998 Feb 15;91(4):13 73-8 1)
- Wilms tumor (Kleymenova EV et al. "Identification of a tumor-specific methylation site in the Wilms tumor suppressor gene" Oncogene 1998 Feb 12;16(6):713-20)
- Prader-Willi/Angelman syndrome (Zeschnigh et al. "Imprinted. .

.

The. present invention uses the modifications in the methylation pattern of the DNA for screening of biologically effective substances. In general, the invention uses the fact that the biological effect of a potentially biologically effective drug,. . .

The invention has several advantages in comparison to other. screening methods, in particular combinatorial chemistry. First, the reaction conditions of the drug, chemical substance or pharmaceutical composition with the biological test system. . .

Second, the analysis of the methylation pattern of the DNA allows screening of the in vivo effect of the substance in a one-step procedure using one controllable reaction (namely, the bisulfite treatment in order. . .

Thirdly, screening for potential lead-compounds becomes less time consuming and less costly, since the complete screening and analysis procedure can be automated.

Fourth, the inventive method allows the inclusion of personal data into the selection/analysis procedure which allows for a personalised screening of drugs, chemical substances or phar-
maceutical compositions.

In a further preferred method according to the invention, the biological samples A and B are obtained from the identical individual, tissue, cell or other biological material.

. . .

or
pharmaceutical composition. This allows the use of the inventive method to monitor and/or modify an already employed treatment regimen and to screen for unwanted side effects of the initially employed drugs, chemical substances or p harmaceutical compositions which leads to a strictly ,personalised" medicament. . .

. . .

cytosine methylation sites is analysed in parallel. The analysis of a multitude of sites in parallel allows for both an effec-
tive screening and a statistically highly relevant result of the method.

. . .

one to directly connect the tested drug, chemical substance or pharmaceutical composition with

an effect on those
genes and therefore allow the identification of possibly
valuable new lead compounds as well
as therapeutically important compounds.

In one embodiment, the method of the invention is characterised in that the identical biologi-
cal sample, different biological samples or a combination thereof is used in steps a) and/or b).

Example 2
Screening of a peptide library
A peptide library was prepared in a 96-well culture plate which contained overlapping peptide
fragments derived from the. . .
. . .
micro arrays representing 256 CpG
and the inethylation statuses of the CpGs were analysed according to a method described in Example 3
Screening of a fractionated plant crude extract
In order to analyse the anti-metastatic effect of Celosia argentea seed extracts (CAE), which
have traditionally. . .
. . .
(CD47 anti-
gen (Rh-related antigen, integrin-associated signal transducer); CD48 (CD48 antigen (B-cell
membrane protein); CD53 (CD53 antigen); CD59 (CD59 antigen p18-20 (antigen identified
by monoclonal antibodies 16.3A5, EJ16, EBO, EL32 and G344); CD63 (CD63 antigen (me-
lanoma I antigen); CD68 (CD68 antigen); CD7 (CD7 antigen. . . LAMA4 (Laminin, alpha 4); LAMA5 (Laminin, alpha 5);
LY64 (Lymphocyte antigen 64 (mouse) homolog, radioprotective, 105kD); LYZ (Lysozyme
(renal amyloidosis)); MDUI (Antigen identified by monoclonal antibodies 4F2, TRAI.10,
TROP4, and T43); MET (Met proto-oncogene (hepatocyte growth factor receptor)); MIC2
(Antigen identified by monoclonal antibodies 12E7, F21 and 013); MICA (MHC class I po-
lypeptide-related sequence A); MME (Membrane metallo-endopeptidase (neutral endopepti-
dase, enkephalinase,. . .
. . .
I (BCL2-
related)); MCM4 (Minichromosome maintenance deficient (S. cerevisiae) 4); MEKK3
(MAP/ERK kinase kinase 3); MEKK5 (MAP/ERK kinase kinase 5); MKI67 (Antigen identi-
fied by monoclonal antibody Ki-67); MSTIR (Mdcrophage stimulating 1 receptor (c-met-
related tyrosine kinase)); NCKI (NCK adaptor protein 1); NEK3 (NIMA (never. . .
. . .
of split);
AFD I (Acrofacial dysostosis 1, Nager type); AGC I (Aggrecan I (chondroitin sulfate proteo-
glycan 1, large aggregating proteoglycan, antigen identified by monoclonal antibody AO 1 22));
AH02 (Albright hereditary osteodystrophy-2); A1113 (Amelogenesis imperfecta 3, hypoinatu-
ration or hypoplastic type); ALX3 (Aristaless-like horneobox. . .
. . .
related

to AF4); LYLI (Lymphoblastic, leukemia derived sequence 1); MAFG (V-maf musculoapo-
neurotic fibrosarcoma (avian) oncogene family, protein G); MAX (MAX protein); MDM2
(Mouse double minute 2, human homolog of; p53-binding protein); MHC2TA (MHC class II
transactivator); MKI67 (Antigen identified by monoclonal antibody Ki-67); MNDA (Myeloid
cell nuclear differentiation antigen); MSXI (Msh (Drosophila) homeo box homolog I (for-
merly homeo box 7));. . .

. . .

integrin-associated
signal transducer)); CD5 (CD5 antigen (p56-62)); CD53 (CD53 antigen); CD58 (CD58 anti-
gen, (lymphocyte function-associated antigen 3)); CD59 (CD59 antigen p18-20 (antigen
identified by monoclonal antibodies 16.3A5, EJ16, EJ30, EL32 and G344)); CD5L (CD5 an-
tigen-like (scavenger receptor cysteine rich family)); CD6 (CD6 antigen);. . .

. . .

LYN (V-yes-1
Yamaguchi sarcoma viral related oncogene hornolog); LYZ (Lysozyme (renal amyloidosis))-,
MISI (Membrane component, chromosome 1, surface marker I (400 glycoprotein, identi-
fied by monoclonal antibody GA733)); MAB21L1 (Mab-21 (C. elegans)-like 1); MACAMI
(Mucosal addressin cell adhesion molecule-1); MADHI (MAD (mothers against decapentap-
legic, Drosophila). . . MCC (Mutated in colorectal cancers); MCF2 (MCF.2 cell line derived
transforming sequence); MCP (Membrane cofactor protein (CD46, trophoblast-lymphocyte
cross-reactive antigen)); MDF1 (Antigen identified by monoclonal antibody A-3A4); MDH2
(Malate dehydrogenase 2, NAD (mitochondrial)); MDUI (Antigen identified by monoclonal
antibodies 4172, TRALIO, TROP4, and T43); MEI (Malic enzyme 1, soluble); ME2 (Malic
enzyme 2, mitochondrial); MEKKI (MAP/ERK kinase kinase. . . MEMOI (Methylation modifier for class I HLA); MENI (Multiple endocrine neoplasia 1); MEPIA (Meprin A, alpha (PABA peptide hydrolase)); MER2 (Antigen identi-
fied by monoclonal antibodies 1D12, 2177); MFAP2 (Microfibrillar-associated protein 2);
MFAP4 (Microfibrillar-associated protein 4); MFTS (Migraine, familial typical, susceptibility
to); MGCT ( MGI); MGP (Matrix Gla protein); MHC2TA (MHC class 11 transactivator);
MIC2 (Antigen identified by monoclonal antibodies 12E7, F21 and 013); MI C5 (Antigen
identified by monoclonal antibody RI); MIC7 (Antigen identified by monoclonal antibody
28 7); MICA (MHC class I polypeptide-related sequence A); MIF (Macrophage migration
inhibitory factor (glycosylation-inhibiting factor)); MIG (Monokine induced. . .

. . .

(Uridine phosphorylase); UPK1B (Uropla-
kin 113); UROD (Uroporphyrinogen decarboxylase); UROS (Uroporphyrinogen III synthase
(congenital erythropoietic porphyria)); USH2A (Usher syndrome 2A (autosornal recessive,

mild)); USP7 (Ubiquitin specific protease 7 (herpes virus-associated)); VASP (Vasodilator-stimulated phosphoprotein); VCAM I (Vascular cell adhesion molecule 1); VDAC I (Voltage-dependent anion. . .

. . .

CD48 (CD48 antigen (B-cell membrane protein)); CD53 (CD53 antigen); CD58 (CD58 antigen, (lymphocyte function-associated antigen 3)); CD59 (CD59 antigen p18-20 (antigen identified by monoclonal antibodies 16.3A5, EJ16, EJ30, EL32 and G344)); CD63 (CD63 antigen (melanoma 1 antigen)); CD68 (CD68 antigen); CD7 (CD7 antigen. . . gene 3); LY64 (Lymphocyte antigen 64 (mouse) homolog, radioprotective, 105kD); LYZ (Lysozyme (renal amyloidosis)); MAPIB (Microtubule-associated protein 113); MDUI (Antigen identified by monoclonal antibodies 4172, TRALIO, TROP4, and T43); MIC2 (Antigen identified by monoclonal antibodies 12E7, F21 and 013); MICA (MHC class I polypeptide-related sequence A); MME (Membrane metalloendopeptidase (neutral endopeptidase, enkephalinase, CALLA,. . .

melanogaster muscleblind B protein); MDM2 (Mouse double minute 2, human homolog of, p53-binding protein); MHC2TA (MHC class 11 transactivator); MKI67 (Antigen identified by monoclonal antibody Ki-67); MNDA (Myeloid cell nuclear differentiation antigen); MSX1 (Msh (Drosophila) homeo box homolog 1 (formerly homeo box 7)); MTHFD. .

. . .

member 3)); LYN (V-yes-1 Yamaguchi sarcoma viral related oncogene homolog); MIS I (Membrane component, chromosome 1, surface marker I (40kD glycoprotein, identified by monoclonal antibody GA733)); M4SI (Membrane component, chromosomal 4, surface marker (35kD glycoprotein)); MADH4 (MAD (mothers against decapentaplegic, Drosophila) homolog. . . oncogene: family, protein K); MASI (MASI oncogene); MAX (MAX protein); MCC (Mutated in colorectal cancers); MCF2 (MCF.2 cell line derived transforming sequence); MDM2 (Mouse double minute 2, human homolog of-, p53-binding protein); MEL (Mel transforming oncogene (derived from cell line NK14)- RAB8 homolog); MELLI (Mel. . . member 1)); LTB (Lymphotoxin beta (TNF superfamily, member 3)); MIS I (Membrane component, chromosome 1, surface marker I (40kD glycoprotein, identified by monoclonal antibody GA733)); M4SI (Membrane component, chromosomal 4, surface marker (35kD glycoprotein)); MADH4. (MAD (mothers against decapentaplegic, Drosophila) homolog 4);. . .

CLMEN. . . according to any of claims I to 4, characierised in that the biological samples A and B are obtained from the identical individual, tissue, cell or other biological material.

. Method according claim 5, characterised in that the biological samples A. and B. . .

28 Method according to any of claims I to 27, characterised in that the identical biological
sample, different biological samples or a combination thereof is used in steps a) and/or b).

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ACCESSION NUMBER: 2002:312567 CAPLUS
DOCUMENT NUMBER: 137:44608
TITLE: Deubiquitination of p53 by HAUSP is an important pathway for p53 stabilization
AUTHOR(S): Li, Muyang; Chen, Delin; Shiloh, Ariel; Luo, Jianyuan; Nikolaev, Anatoly Y.; Qin, Jun; Gu, Wei
CORPORATE SOURCE: Institute for Cancer Genetics, and Department of Pathology, College of Physicians b Surgeons, Columbia University, New York, NY, 10032, USA
SOURCE: Nature (London, United Kingdom) (2002), 416(6881), 648-652
CODEN: NATUAS; ISSN: 0028-0836
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The p53 tumor suppressor is a short-lived protein that is maintained at low levels in normal cells by Mdm-mediated ubiquitination and subsequent proteolysis. Stabilization of p53 is crucial for its tumor suppressor function. However, the precise mechanism by which ubiquitinated p53 levels are regulated in vivo is not completely understood. By mass spectrometry of affinity-purified p53-associated factors, the authors have identified herpesvirus-associated ubiquitin-specific protease (HAUSP ) as a novel p53-interacting protein. HAUSP strongly stabilizes p53 even in the presence of excess Mdm2, and also induces p53-dependent cell growth repression and apoptosis. Significantly, HAUSP has an intrinsic enzymic activity that specifically deubiquitinates p53 both in vitro and in vivo. In contrast, expression of a catalytically inactive point mutant of HAUSP in cells increases the levels of p53 ubiquitination and destabilizes p53. These findings reveal an important mechanism by which p53 can be stabilized by direct deubiquitination and also imply that HAUSP might function as a tumor suppressor in vivo through the stabilization of p53.
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